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09/272,190 03/18/99 WILSON

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| EXAMINER | |

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| MARTIN | PAPER NUMBER |
| MARKOVICH, K | |

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/272,190

Applicant(s)

Jack H. Wilson Sr.

Examiner

Kristine Markovich

Group Art Unit

3671



☒ Responsive to communication(s) filed on Oct 25, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-19 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-19 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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Response to Amendment

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayden (US Patent 1,955,421) in view of Reed et al. (US Patent 5,079,095), and further in view of Fekete et al. (5,494,741).

Hayden discloses applying a first layer of concrete over a road surface (b, figure 1) and applying a coating layer over this first layer, then repeating this process by applying a second layer of concrete (e, figure 1) over the first layer and again applying a coating layer.

Hayden discloses the claimed device except for the rock chips in the water impervious coating layers. Reed et al. discloses that it is known in the art to provide rock chips (column 2, lines 37-40) in order to reduce hazardous road surface conditions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the concrete structure of Hayden with the rock chips of Reed et al., in order to reduce hazardous road surface conditions.

Regarding the limitation that the concrete be specifically polymer modified concrete, Fekete et al. teaches that polymer concrete compositions are commonly used in pot-hole and

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bridge deck surfaces such that it can be prepared at an off-site location and trucked to the location without substantial leakage (column 4, lines 17-38).

Regarding claims 2 and 4, it would have been an obvious matter of design choice to modify Hayden to have 1/16th to 1/8th inch concrete thickness, since applicant has not disclosed that having the concrete at this specific depth solves any stated problem or is for any particular purpose and it appears that the road would withstand wear with the concrete at any depth.

Regarding claims 3 and 5, although Hayden does not specifically state that the surface material (i.e. rock chip) is placed into the concrete by blowing, it would have been obvious to one of ordinary skill to use this procedure to accomplish embedding the rock chips, since it is well known in the art that the rock chips need to be firmly adhered to the concrete in order to provide the desired surface properties.

3. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cranford (US Patent 210,101) in view of Barton (US Patent 3,775,018), and further in view of Fekete et al.

Cranford discloses the claimed device except for anti-ponding lines. Barton discloses that it is known in the art to provide anti-ponding lines (column 1, lines 31-46) in order to promote drainage and increase the frictional properties of the road surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the pavement of Cranford with the anti-ponding lines of Barton, in order to promote drainage and increase the frictional properties of the road surface.

Regarding the limitation that the concrete be specifically polymer modified concrete, Fekete et al. teaches that polymer concrete compositions are commonly used in pot-hole and

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bridge deck surfaces such that it can be prepared at an off-site location and trucked to the location without substantial leakage (column 4, lines 17-38).

4. Claims 12, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayden in view of Jones (US Patent 5,700,385), and further in view of Fekete et al.

Hayden discloses the claimed device except for electrical heating elements. Jones discloses that it is known in the art to provide electrical heating elements (column 1, lines 14-26) in order to prevent the accumulation of snow and ice on driving surfaces. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the concrete structure of Hayden with the electrical heating elements of Jones, in order to prevent the accumulation of snow and ice on driving surfaces.

Regarding the limitation that the concrete be specifically polymer modified concrete, Fekete et al. teaches that polymer concrete compositions are commonly used in pot-hole and bridge deck surfaces such that it can be prepared at an off-site location and trucked to the location without substantial leakage (column 4, lines 17-38).

Regarding claims 16 and 17, it would have been an obvious extension of the teachings of Hayden to apply the first layer of concrete to cover the wheel lanes of the road surface in order to reinforce the area of the road that receives the most wear from traffic.

Regarding claims 18 and 19, it would have been obvious to one having ordinary skill in the art at the time the invention was made to connect an electrical heating element to a power source such as a battery or photovoltaic energy source in order to provide power to the element and maintain the elements in working condition.

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5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayden in view of Jones and Fekete et al. as applied to claim 12 above, and further in view of Reed et al.

The combination of paragraph 7 above discloses the claimed device except for the rock chips in the water impervious layers. Reed et al. discloses that it is known in the art to provide rock chips (column 2, lines 37-40). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the concrete structure of the combination of paragraph 7 above with the rock chips of Reed et al., in order to reduce hazardous road surface conditions.

6. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayden in view of Jones and Fekete et al. as applied to claim 12 above, and further in view of Gemmer (US Patent 4,941,770).

The combination of paragraph 7 above discloses the claimed device except for copper wires in the heating elements. Gemmer discloses that it is known in the art to provide copper wires in heating elements (column 2, line 58- column 3, line 30). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the concrete structure of the combination of paragraph 7 above with the copper wires of Gemmer, in order to reduce hazardous road surface conditions.

Response to Arguments

7. Applicant's arguments filed October 25, 2000 have been fully considered but they are not persuasive.

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In regard to the argument made by applicant to the rejection of claims 1-8, examiner contends that the base reference of Hayden reads over the claim language of "a method of resurfacing roads". Examiner is interpreting this language to encompass the paving of any road in existence. In this sense, the method described by Hayden could be used to "resurface" an existing roadway which is a simple dirt road or a concrete road which would need to be demolished in order to create new the pavement. Additionally, one skilled in the art would take the teachings of Hayden and apply them in any paving process.

Regarding the argument that Hayden does not teach "applying a first layer of polymer modified concrete over a road surface" or "applying a first layer of rock chips over the polymer modified concrete layer" examiner disagrees. Hayden teaches applying a first layer of concrete over a road surface and then applying a coating layer over the concrete layer. Regarding the fact that the concrete is not "polymer modified" and that rock chips were not added in the coating layer, appropriate secondary references have been used. Motivation to combine the secondary references have been explained in the preceding paragraphs and the basis for combining the references is that they all deal with the process of paving a road surface.

Examiner's response to applicant's argument with respect to the rejections of claims 9-11 and 12-19 is similar to the response stated above to claims 1-8. In response to applicant's statement that Cranford is directed to new road construction, examiner is interpreting the language of "a method of resurfacing roads" in the broad sense such that Cranford is resurfacing a known, used roadway. Whether or not the original surface structure is made of dirt, wood, stone, or concrete is not of consequence. Again, the teaching of Cranford to use concrete having a coating of rock chips over it would be used by one skilled in the art.

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Additionally, regarding the argument that the teaching of an application of polymer modified concrete or heating elements specifically in the wheel lanes has not been shown in the references provided, examiner contends that it would have been an obvious extension of the teachings of Hayden to apply the first layer of concrete to cover the wheel lanes of the road surface in order to reinforce the area of the road that receives the most wear from traffic and also place the heating elements in the most useful area of the traffic lanes in order to reduce the possibility of ice build up in the roadway.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristine M. Markovich whose telephone number is (703) 305-1676. The examiner can normally be reached on Mon-Fri from 8:00 am to 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (703) 308-3780. The fax phone number for this Group is (703)305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-1113.



Thomas B. Will
Supervisory Patent Examiner
Group 3600


KMM

January 14, 2001